

Yashwant Singh

FINAL YEAR UNDERGRADUATE
MECHANICAL ENGINEERING
Jabalpur Engineering College, Jabalpur

 (+91)991-892-6407  yashwantvictory0402@gmail.com | LinkedIn: <https://www.linkedin.com/in/yashwantsinghamh>

Summary

A core mechanical, Information Technology and business enthusiast with relevant research and experience, multiple awards winner and finalist in various events, having two patents under review, passionate about research in core mechanical topics along with business, innovation, policy making and implementation experience with an aptitude and inclination towards research, learning new skills, perseverance and sincerity towards completing a project.

Education

Examination	University	Institute	Year	CPI
Graduation	RGPV-Bhopal	JEC Jabalpur [7 th Sem]	2023	8.1 *
Intermediate/+2	CBSE	Bhagat Public Sr. Sec School	2019	67*
Matriculation	CBSE	Children Sr. Sec. School	2017	86*

*Closest to integer.

Scholastic Achievements

Internships:

Summer Intern in E-waste Management at **Hindustan Copper Limited** (HCL, Malanjkhand).

Research Intern in Case study of automobile sector in India at **Oil and Natural Gas Corporation** (ONGC).

Summer Intern in Inventory Management at Hanuman Furniture Products.

Intern as a Data Analyst at O Wheels.

2022	TechXenium by JEC Jabalpur: Won 10,000 INR for being the best performing team in the event.
2021	Academic Excellence: Scored a Semester Performance Index of 9.0 out of 10 CGPA in the 4th, 5th Semester at JEC, Jabalpur.
2021	JEC-Jabalpur Coding Hackathon: Came third in the inter year JEC-Hackathon – Coding Based.
2021	Subject Academic Performer: Awarded Ex grade for outstanding performance in 5+ courses.
2019	Joint Entrance Examination: Qualified JEE mains and JEE Advance among 1.2 million aspirants.
2019	Opening Rank: Opening rank in Mechanical Engineering in Jabalpur Engineering College.

Selection in Internships :
[Not joined due to personal constraints]

Internship in **Bharat heavy electricals limited** Internship program.

Internship at **Mecha Toilet** under Research and Development category Internship.

Total Patents [under review]: 2.

Pre-Placement Offer:

1. Selected for **FedEx** India COE talent hub 2022 round 3.
2. Selected for **Tata Advanced System Limited's** PPO round.
3. Got a pre-placement offer from O Wheels as a data analyst.

Technical Projects

Minor- Free Vibration Analysis of FGM Plate Using ANSYS

This project was given under Academics (Minor Project).

JEC, Jabalpur
Feb. 2022 – July. 2022

- Patent Pending.
- Part of a 6-member team.
- obtained the different fracture and deformation curve with its free vibration analysis.
- All the boundary conditions of the vibration analysis are compared on the single graph for comparison.

Customer analysis dashboard using (Tableau)

GitHub
December. 2021

- In this project, I analysed the dataset first and created some important charts.
- I finally built a dashboard using Tableau, which works perfectly.

Covid -19 (analysis and visualisation).

GitHub
May. 2022

- Analysed the COVID data using NumPy and Pandas.
- I visualise the data on types of plots such as kde, rug, bar etc..

AgriVoltaics - Water Energy & Food Nexus

DESIGN and Innovation ENGINEERING.

JNKV, Jabalpur
March. 2021, PRESENT

- Patent Pending.
- Integrating PV based electricity generation and crop production from a same land unit.
- Studied on the working efficiency when there is a different proportion of solar panels and agricultural production.
- The solution is sent to a number of incubators that are based on deep-tech to make this solution incubated and readily available for the industry and the concerned parties.

E-Waste Management

Hindustan Copper Limited

DESIGN and Innovation ENGINEERING

July. 2022

- Understand current E-waste management system.
- Identify various stakeholders associated with e-waste management system.
- Analyse policy framework for sustainable e-waste management.
- Understand e-waste management practices in Jabalpur region.

Traffic Control System (TCS).

Smart India Hackathon, GOI
2021.

DESIGN and Innovation ENGINEERING

- Patent Pending.
- Led 5-member team.
- Designed a very unique model for traffic prone areas in metropolitan cities.
- High traffic issue can be resolved with the help of an Automated Challan System (ACS) that is based on the Automatic LPDR using deep learning.
- Also develop Diverging board (DB) and Elevated Light (EL) Model to bypass traffic.
- Got mentorship from the Jabalpur Incubation Centre.

Rural development project for East U.P.

U.P, India
May. 2022 – PRESENT

Working with **Member of Parliament, Azamgarh**

- Transform unemployed youth villagers to a professional freelancer.
- Manage agricultural production by providing fertilizers, seeds, loan or any kind of useful resources.
- Boarding schools interlinked with other rural areas all over the U.P
- Standardise rural areas by structuring parks, dharmshalas, marriage hall, street light to boost rural tourism.
- Establishment of a private organisation to manage all of these.

Online food delivery service

Jabalpur incubation centre, Jabalpur

Based on free delivery

Aug. 2022 - PRESENT

- Based on hybrid of giants like Swiggy and Walmart, and working culture inspired by Tesla.
- Primary focus on quantity of customers and quality of product.
- Studied about hundreds of cloud kitchen and their finance.
- Researched on Jidoka method in Indian food market.
- Completed a report on how farmers, businessmen, and the government are stakeholders in a single private entity.

Electric Vehicle – A case study of automobile sector in India

ONGC, Dehradun
June. 2022 – July. 2022

DESIGN and Innovation ENGINEERING

- Mentioning about technical difference between IC Engine & Batteries.
- Had done SWOT Analysis for Electric vehicle.
- Proposed reverse energy generation techniques so that the overall energy consumption will get reduced.
- Recycling of unused lithium-ion batteries to overcome the issue of battery disposal.
- Designed full structural design and is currently under progress for various simulation results.

DESIGN ANALYSIS OF FUEL TANK COVER CAP FOR JCB

JCB India Limited, Pune

DESIGN and Innovation ENGINEERING

May. 2022

- Made a design that is scientifically accurate, cost effective, ensures only filtered air to enter without any dust particle.
- Calculated uniformity index for the design.
- Calculated the aspect ratio and the parameters of the design.
- Made design failure modes and effects analysis (dfmea) of fuel tank cover cap.
- Made process failure modes and effects analysis (pfmea) of fuel tank cover cap.

Websites/News-Articles Featuring me

- <https://www.yashwantsingh.com>
- <https://www.ecelljec.com/Team>
- <https://www.ecelljec.com/Event>
- Featured on NPCIL (Nuclear Power Corporation India Limited) for organising their event.
- Featured on Dainik Bhaskar for organising Techno-Cultural fest (Aureole) in college campus.
- Featured on local newspaper as a finalist team in Smart India Hackathon.
- Featured on local newspaper for organising Entrepreneurship Fest in college campus.
- Featured on local newspaper for organising Platinum Jubilee in college campus.
- Featured on local newspaper as my article was published on Entrepreneurship.
- Featured on Jabalpur Incubation Centre site for presenting my start-up idea into their forum.

Hobby Projects

Production of A2 milk in India

MECHANICAL DESIGN ENGINEER

JNKV, Jabalpur

Dec. 2017 - Present

- Undertook significant efforts towards conceptual designing and building of an integrated mechanical structure of a Cattle house with increased efficiency based on the solar cells connected to it by altering the structure.
- Used novel manufacturing techniques such as 3D printing achieving a holistic design of cattle house.
- Researched about self-sustainability of male cattle.
- Researched on versatility of overseas market for various cow dung products.

Courses Undertaken

	Design of Machines *, Heat Transfer, Manufacturing
Core Courses	Processes, Fluid Mechanics, Strength of Materials, Thermodynamics, Mechanics of Machines, Thermal Power Engineering, Plant Layout and Management, Material Science, Basic Electronics, Engineering Mechanics, Engineering Graphics and Drawing
Computer Science	Machine Learning, Computer Programming and Utilization, Numerical Analysis, Mechanical Measurements.

Skills

Languages	[C, Java] [Basics] , [Python, SQL] [Intermediate], Machine learning [Basics].
Software	[Tableau, Ms-Excel] [Intermediate], [AutoCAD, Fusion-360, Catia-V5, Ansys] [Intermediate]
Sensors	[Arduino specific sensors like Proximity sensor, light sensor, etc] [Basics]
Core	Knowledge of Theory of Machines, Engineering Materials and Fluid Mechanics in specific along with all the Core subjects adjoining with management, industrial analysis and Industrial business. [Eager to learn more]

Positions of Responsibility

Head Coordinator, E-Cell

Entrepreneurship cell: An important body of college administration.

Jabalpur Engineering College, Jabalpur

July. 2022 - Present

- Lead the Entrepreneurship cell by planning out all the activities in the Start-up/Entrepreneurship domain.
- Plan out all the activities of the E-Cell in consultation with the core team
- Creating Start-up & Freelancing ecosystem in college campus.
- Maintain coordination among all the wings of E-Cell.
- Represent E-Cell JEC at all forums: The faculty/ administration/ and external associates.

School Captain

Head boy responsible for various student led activities.

Bhagat Public Sr. Sec. School, Kota

2017 - 2019

- Achieved first in interschool sports competition under my leadership.
- Organised various science exhibition and sports tournament.
- Coordinated various national and school level Olympiad.

Head sponsorship team, Aavahan 2k19 & 2k22

Aavahan: Annual sport fest

Jabalpur Engineering College, Jabalpur

2019 & 2022

- Lead the Sponsorship team by inviting and coordinating with the investors.
- Found sponsorship worth rupees lakhs.
- Ensure proper communication between investors and coordinators.
- Ensure that during the event, enthusiasm level remains high.

Head volunteer, Aureole

Aureole: Annual techno-cultural fest.

Jabalpur Engineering College, Jabalpur

March, 2020

- Manage more than 200 volunteers in various fields.
- Ensured that proper communication is made possible between volunteers and coordinators.
- Worked on ground with many different domains.
- Ensured proper stability amongst the volunteers.

Head management, Platinum jubilee

Platinum jubilee: Celebrated 75th anniversary of our college

Jabalpur Engineering College, Jabalpur

July, 2022

- Made possible for the meet of thousands of alumni of the second oldest engineering college of India.
- Ensured proper communication between chief minister office and college administration.
- Ensured that the celebration reaches more than 20 thousand people.
- Earned appreciation from chief minister and other respected guests for smooth and disciplined mangament.

Exam cell head, Kaarwaa.n

Kaarwaan: A social welfare group of college students for underprivileged students.

Jabalpur Engineering College, Jabalpur

2019 to 2021

- Prepared the underprivileged kids for various govt. entrance exam.
- Took exams on regular basis for the adaptability of exam pressure.
- Improved the skills of those kids after reviewing their assessment
- 8 students got selected in various different entrance exams under my supervision.

Solutions on Quora.

Quora is one of the LARGEST SCIENCE AND TECHNOLOGY platform.

Quora

Jul. 2018 – Present.

- Rising Writer in the Entrepreneurship and Agriculture section.
- Solved various questions related to Innovations, budding start-ups, entrepreneurships, data analysis and agriculture.

Extracurricular Activity

- | | |
|------|---|
| 2020 | Dance: Went to dance classes. |
| 2020 | Data Analysis: Provided many analytical solutions to budding start-ups. |
| 2019 | Social: Devoted many hours of social service under Educational Outreach via various NGOs. |